### **REMARKS**

## Status of the Claims

Claims 1-22, 24, 25, and 30-39 are pending. Claims 1 and 24 are independent. Claims 1-22, 38, and 39 are withdrawn pursuant to the restriction requirement dated June 11, 2009. In this Reply, claims 24, 30, 31, and 35-39 have been amended. Support for the amendments exists, *inter alia*, in original claims 24, 30, 31, and 38. No new matter has been added.

Applicants respectfully request the Examiner reconsider and withdraw the objections and rejections in view of the foregoing amendments and the following remarks.

# Claim Objections

Claim 24 has been amended to recite, in-part, "[a] mass tag reagent for labeling a molecule to be characterized by mass spectrometry, having the following formula" as there is only one chemical formula present in the claim. This amendment obviates the objections to claims 24-25 and 30-37. Accordingly, withdrawal of the objections is respectfully requested.

#### Rejections Under 35 U.S.C. § 102

The following rejections are respectfully traversed: (1) the rejection of claims 24-25 and 30-31 under 35 U.S.C. § 102(b) over Haralambidou et al., Effect of Distal Positional Isomerism on Peptide Fragmentation. A Comparison of Dimethylaminobenzylidene and Benzoyl Derivatives, Organic Mass Spectrometry, 1975, Vol. 10, pp. 683 to 697 ("Haralambidou et al."); and (2) the rejection of claims 24-25 and 30-37 under 35 U.S.C. § 102(e) over U.S. Patent Application Publication No. 2004/0220412 ("Pappin et al.").

Independent claim 24, as amended, is directed to a mass tag reagent for labeling a molecule to be characterized by mass spectrometry, having the following formula:

According to claim 24, R<sup>1</sup> and R<sup>2</sup> may be the same or different and are independently selected from alkyl groups and aralkyl groups; the reactive functionality RF is selected from the group consisting of active esters of carbonic acids, alkenyl sulphones, haloalkanes, maleimides, isocyanates, isothiocyanates, ketones, aldehydes, sulphonyl-halides, carboxylichalides, anhydride esters, alkenes, N-hydroxysuccinimide esters, hydroxybenzotriazole esters, hydroxyazabenzotriazole esters, nitrophenyl esters, trichlorophenyl esters and pentafluorophenyl esters; and the linker L is an alkylene group.

Haralambidou et al. does not anticipate the presently claimed compounds because Haralambidou et al. does not disclose the recited linker L, which is an alkylene group. Rather, the compounds disclosed in Table 2 and in formula (III) of Haralambidou et al. cited in the Office Action include phenylene groups (highlighted by the arrows).

Compounds disclosed in Table 2

Pappin et al. does not anticipate the presently claimed compounds because Pappin et al. does not disclose the recited  $R^1$  and  $R^2$  groups. As recited in claim 24,  $R^1$  and  $R^2$  are independently selected from alkyl groups and aralkyl groups. The labeling reagents

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disclosed in claim 69 of Pappin et al. cited in the Office Action include the ether groups

, not the recited alkyl groups and aralkyl groups.

For at least these reasons, withdrawal of the § 102(b) rejection over Haralambidou et al. and the § 102(e) rejection over Pappin et al. is respectfully requested.

## Conclusion

In view of the foregoing, the application is respectfully submitted to be in condition for allowance, and prompt, favorable action thereon is earnestly solicited.

If there are any questions regarding this Reply or the application in general, it would be appreciated if the Examiner could telephone the undersigned at (202) 624-2871 so that examination of this application may be expedited.

If necessary to effect a timely response, this paper should be considered as a petition for an Extension of Time sufficient to effect a timely response, and please charge any deficiency in fees or credit any overpayments to Deposit Account No. 05-1323 (Docket # 104056.B600303).

Respectfully submitted,

June 17, 2011

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